

WHAT IS CLAIMED IS:

1 1. A method of controlling an automated transmission
2 of a motor vehicle having an engine controlled by an
3 accelerator pedal whose degree of depression is expressed as
4 a pedal-depression value, wherein a gear-shifting strategy of
5 the transmission is determined based on at least one shift
6 characteristic, said method comprising the steps of
7 - determining at least one of the pedal-depression value and
8 a driver-demanded torque which is calculated by an engine
9 control unit,
10 - evaluating the at least one shift characteristic by taking
11 said at least one of the pedal-depression value and
12 driver-demanded torque into account as an input quantity
13 for said evaluation, and
14 - determining the gear-shifting strategy based on said
15 evaluation.

1 2. The method of claim 1, wherein said pedal-
2 depression value and driver-demanded torque are taken into
3 account by using a mixed quantity composed of the pedal-
4 depression value and driver-demanded torque.

1 3. The method of claim 2, wherein in said evaluation
2 of the at least one shift characteristic, the mixed quantity
3 is entered as an argument.

1 4. The method of claim 2, wherein the mixed quantity
2 is composed so that
3 - the mixed quantity depends substantially on the pedal-
4 depression value when the pedal-depression value is large,
5 and
6 - the mixed quantity depends substantially on the driver-
7 demanded torque when the pedal-depression value is small.

1 5. The method of claim 3, wherein the argument is
2 determined by means of the equation:

3 $A = PW$ for values of $PW > PW_MAX$, wherein
4 - PW_MAX represents a maximum pedal-depression value in %,
5 - PW represents the pedal-depression value in %, and
6 - A represents the argument.

1 6. The method of claim 5, wherein the maximum pedal-
2 depression value PW_MAX indicates a threshold value, so that
3 for values of $PW > PW_MAX$ the driver-demanded torque has no
4 influence on the argument.

1 7. The method of claim 3, wherein the argument is
2 determined by means of the equation:

3
$$A = PW \times (PW_MAX - PW) \times (MM - PW) / DENOMINATOR + PW$$

4 for values of $PW < PW_MAX$,

5 wherein

- 6 - DENOMINATOR represents a parameter that determines a
- 7 degree of influence of the engine torque,
- 8 - MM represents the driver-demanded torque in %,
- 9 - A represents the argument,
- 10 - PW represents the pedal-depression value in %, and
- 11 - PW_MAX represents a maximum pedal-depression value in %.

1 8. The method of claim 7, wherein the maximum pedal-
2 depression value PW_MAX indicates a threshold value, so that
3 for values of $PW > PW_MAX$ the driver-demanded torque has no
4 influence on the argument.

1 9. The method of claim 7, wherein the parameter
2 DENOMINATOR determines said degree of influence of the engine
3 torque in such a manner that a large value of DENOMINATOR is
4 associated with a small degree of influence of the engine
5 torque.

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1 10. The method of claim 1, wherein the driver-
2 demanded torque is determined by taking traction torques into
3 account.

1 11. The method of claim 5, wherein a value of
2 substantially 70 percent is selected for the maximum pedal-
3 depression value.

1 12. The method of claim 7, wherein a value of
2 substantially 70 percent is selected for the maximum pedal-
3 depression value.

1 13. The method of claim 7, wherein a value of
2 substantially 3.000 is selected for the parameter
3 DENOMINATOR.